Title (en)

ENERGY CONSUMPTION EFFICIENCY IMPROVING METHOD, MOBILE TERMINAL AND APPLICATION OF THERMOELECTRIC CONVERSION MODULE

Title (de)

VERFAHREN ZUR VERBESSERUNG EINER STROMVERBRAUCHSEFFIZIENZ, MOBILES ENDGERÄT UND ANWENDUNG EINES THERMOELEKTRISCHEN UMWANDLUNGSMODULS

Title (fr)

PROCÉDÉ D'AMÉLIORATION DE L'EFFICACITÉ ÉNERGÉTIQUE, TERMINAL MOBILE ET APPLICATION DE MODULE DE CONVERSION THERMOÉLECTRIQUE

Publication

EP 2597770 A4 20160330 (EN)

Application

EP 11809172 A 20110329

Priority

- CN 201010236797 A 20100723
- CN 2011072236 W 20110329

Abstract (en)

[origin: EP2597770A1] The present disclosure provides a method of improving the energy consumption efficiency and a mobile terminal thereof, and a use of a thermo-electric conversion module. The method comprises the following steps: A. a power amplifier module electrically connected to a circuit board of the mobile terminal amplifies a communication signal of the mobile terminal to generate heat energy; B. a thermo-electric conversion module, of which an output terminal is electrically connected to the circuit board, absorbs the heat energy generated by the power amplifier module during operation; and C. the thermo-electric conversion module converts the heat energy absorbed into electric power and output the electric power to the circuit board. The thermo-electric conversion module is used in the mobile terminal to absorb heat energy generated during operation of the power amplifier and to convert the heat energy into electric power, so the energy consumption efficiency of the mobile terminal is improved; and meanwhile, this also reduces the temperature rise of the mobile terminal after a long period of talking, reduces the impact of the high temperature on use of the mobile terminal, and improves the safety of the battery of the mobile terminal.

IPC 8 full level

H02N 3/00 (2006.01)

CPC (source: EP US)

G06F 1/203 (2013.01 - EP US); **G06F 1/263** (2013.01 - EP US); **G06F 1/266** (2013.01 - EP US); **H02J 7/0042** (2013.01 - EP US); **H04W 52/0209** (2013.01 - EP US); **H10N 19/101** (2023.02 - EP US); Y02D 30/70 (2020.08 - EP US)

Citation (search report)

- [XI] CN 201260290 Y 20090617 - SIM INFORMATION TECHNOLOGY SHA [CN]
- [XI] US 6570362 B1 20030527 - ESTES KURT [US], et al
- [A] US 2003143958 A1 20030731 - ELIAS J MICHAEL [US], et al
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Designated contracting state (EPC)

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DOCDB simple family (publication)

EP 2597770 A1 20130529; **EP 2597770 A4 20160330**; **EP 2597770 B1 20170419**; CN 101931347 A 20101229; CN 101931347 B 20140730; ES 2624701 T3 20170717; US 2013119919 A1 20130516; US 9214619 B2 20151215; WO 2012009983 A1 20120126

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